





RAW SEQUENCE LISTING

DATE: 04/11/2002

80

PATENT APPLICATION: US/09/674,779

TIME: 16:00:51

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\04112002\1674779.raw

## ENTERED

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4 <110> APPLICANT: Jean-Louis RUELLE
      6 <120> TITLE OF INVENTION: BASB019 Proteins and Genes from
             Moraxella Catarrhalis, Antigens, Antibodies, and Uses
     10 <130> FILE REFERENCE: BM45311
     12 <140> CURRENT APPLICATION NUMBER: 09/674,779
C--> 13 <141> CURRENT FILING DATE: 2002-03-05
     15 <150> PRIOR APPLICATION NUMBER: 98096837
     16 <151> PRIOR FILING DATE: 1998-05-06
     18 <160> NUMBER OF SEQ ID NOS: 4
     20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     22 <210> SEQ ID NO: 1
    23 <211> LENGTH: 753
     24 <212> TYPE: DNA
    25 <213> ORGANISM: Moraxella catarrhalis
    27 <400> SEQUENCE: 1
    28 atgaaaaatt ttaatcaata ctttataact acacttatca gcagtatgct ggttgcatgc
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    29 agtgcaccca taccaaccaa tccacaagta tccccaataa aaacgccatc ggtactgatt
                                                                               120
    30 actaaagata aaatcggtga tcatcataca catgagcacg atgaatctgt aagccatgtc
                                                                               180
    31 ggtttgcagg cacattttga gacttggcta cagatgcacc atgccaccaa acaagaggta
                                                                               240
    32 gttaggtatc aggcgtattt acaatcaaga cttggtaatt atctgccacc aatgagtcaa
                                                                               300
    33 ctactaacga ctgcacggtc atggcaggca tgtggtcatg aaccttatca gctgccacca
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    34 gaacatettt ggggtcagat tgtaccaaca ttgcaettgt atcaagatet caaaagtagg
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    35 ggcatattgc cagcaaatac ccaaattcgc tcagtttatc gcaatcctga actcaaccaa
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    36 tgtgctggtg gtgcagctat gagtaagcat ttgaccaata qtgccattga tatttqggtg
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    37 cctgaccttg aaataaaaag ccaggcactg tatgagcttc aaaaccgcct atgccaatat
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    38 tggctagage atggcgaaaa ccaaaatttt gggctgggtt tatacgccac aggggcgatt
                                                                               660
    39 catctggata cccaagggtt tagaaaatgg ggtgctcaat tttctgaaac aaactctatt
                                                                               720
    40 tgtcgtcatg tcttaccaaa aaataagcta taa
                                                                               753
    42 <210> SEQ ID NO: 2
    43 <211> LENGTH: 250
    44 <212> TYPE: PRT
    45 <213> ORGANISM: Moraxella catarrhalis
    47 <400> SEQUENCE: 2
    48 Met Lys Asn Phe Asn Gln Tyr Phe Ile Thr Thr Leu Ile Ser Ser Met
    49 1
                         5
                                            10
    50 Leu Val Ala Cys Ser Ala Pro Ile Pro Thr Asn Pro Gln Val Ser Pro
                   20
                                        25
    52 Ile Lys Thr Pro Ser Val Leu Ile Thr Lys Asp Lys Ile Gly Asp His
                                    40
    54 His Thr His Glu His Asp Glu Ser Val Ser His Val Gly Leu Gln Ala
                                55
                                                    60
    56 His Phe Glu Thr Trp Leu Gln Met His His Ala Thr Lys Gln Glu Val
```

75

70

57 65





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58 Val Arg Tyr Gln Ala Tyr Leu Gln Ser Arg Leu Gly Asn Tyr Leu Pro 90 60 Pro Met Ser Gln Leu Leu Thr Thr Ala Arg Ser Trp Gln Ala Cys Gly 100 105 62 His Glu Pro Tyr Gln Leu Pro Pro Glu His Leu Trp Gly Gln Ile Val 120 64 Pro Thr Leu His Leu Tyr Gln Asp Leu Lys Ser Arg Gly Ile Leu Pro 135 66 Ala Asn Thr Gln Ile Arg Ser Val Tyr Arg Asn Pro Glu Leu Asn Gln 150 68 Cys Ala Gly Gly Ala Ala Met Ser Lys His Leu Thr Asn Ser Ala Ile 165 170 70 Asp Ile Trp Val Pro Asp Leu Glu Ile Lys Ser Gln Ala Leu Tyr Glu 180 185 72 Leu Gln Asn Arg Leu Cys Gln Tyr Trp Leu Glu His Gly Glu Asn Gln 195 200 74 Asn Phe Gly Leu Gly Leu Tyr Ala Thr Gly Ala Ile His Leu Asp Thr 215 76 Gln Gly Phe Arg Lys Trp Gly Ala Gln Phe Ser Glu Thr Asn Ser Ile 77 225 230 235 78 Cys Arg His Val Leu Pro Lys Asn Lys Leu 79 81 <210> SEQ ID NO: 3 82 <211> LENGTH: 40 83 <212> TYPE: DNA 84 <213> ORGANISM: Artificial Sequence 86 <220> FEATURE: 87 <223> OTHER INFORMATION: primer 89 <400> SEQUENCE: 3 90 aggcagaggg aattcatgaa aaattttaat caatacttta 40 92 <210> SEQ ID NO: 4 93 <211> LENGTH: 60 94 <212> TYPE: DNA 95 <213> ORGANISM: Artificial Sequence 97 <220> FEATURE: 98 <223> OTHER INFORMATION: primer 100 <400> SEQUENCE: 4 101 aggcagaggg tcgacttaat ggtgatggtg atggtgtagc ttattttttg gtaagacatg 60





VERIFICATION SUMMARY

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 $L:13\ M:271\ C:$  Current Filing Date differs, Replaced Current Filing Date